ASBESTOS

NOVEMBER - - - 1944



ASBESTOS -



TEXTILES

Volu

VALUE OF EXPERIENCE

AT THE OUTBREAK OF WAR, RAYBESTOS-MANHATTAN, INC., PLACED AVAILABLE FOR WAR PRODUCTION THE FULL FACILITIES OF ITS PLANTS. THE ENTIRE TALENT OF ITS SKILLED TECHNICIANS AND A LONG EXPERIENCE IN SPECIFIC PRODUCT RESEARCH AND MANU-FACTURING. ARMY-NAVY "E" FLAGS. WITH ONE OR MORE STARS, FLYING OVER THE VARIOUS RAYBESTOS-MANHATTAN PLANTS TODAY ATTEST TO THE EFFECTIVENESS OF ITS WAR PRODUCTION, IN YEARS TO COME, THIS SAME EQUIPMENT, TALENT AND EXPERIENCE WILL ENABLE THE DRIVING PUBLIC. MINES. MILLS, FACTORIES AND FARMERS TO OBTAIN THE BEST IN ASBESTOS, MADE BY THE MOST ADVANCED FACILITIES FOR THE BENEFIT OF USERS.

RAYBESTOS-MANHATTAN, INC.

FACTORIES

BRIDGEPORT, CONN.

NO CHARLESTON, S. C.

PASSAIC, N I

"ASBESTOS"

POUNDED IN JULY 1919 AND PUBLISHED MONTHLY SINCE THAT DATE

BY SECRETARIAL SERVICE 17th FLOOR INQUIRER BUILDING PHILADELPHIA, 30, PENNSYLVANIA

Estate of C. J. STOVER, Proprietor
A. S. ROSSITER, Editor

Entered As Second Class Matter November 23, 1923, as the Fost Office at Philadelphia, Pennsylvania, Under Act of March 3, 1879

Volume 26

NOVEMBER 1944

Number 5

CONTENTS

	Page
Advertise the 6th War Loan - Editorial	. 2
Ashestos Mining Methods (Part III)	. 3
Inconel - A New J-M Packing	. 14
Ovens Use Asbestos-Cement Sheet	. 16
Market Conditions	. 18
A. S. T. M. Textile Standards	. 25
Contractors and Distributors Page	
Construction Bureau	26
Building	. 26
Area Table — 1500 lb. Flanges	. 27
Production Statistics (Canada and Union of South Africa)	28
NEWS OF THE INDUSTRY	. 29
Publications Available	36
Patents	36
Current Range of Price	38
Ashestos Stock Quotations	38
This and That	39

SUBSCRIPTION PRICE

UNITED	STATES							\$2.00	PER	YEAR
CANADA				-				3.00	44	46
	COUNTR	TES						3.00	**	44
SINGLE					-			.25	EACE	I
			(Payabl	e in	U. S.	Fund	s)			

Copyright 1944, Maud M. Stover, Executrix, Estate of C. J. Stover

ADVERTISE THE 6th WAR LOAN

Perhaps the 6th War Loan will be launched before this issue of "ASBESTOS" reaches our readers or it may not be started until December, but whenever it begins all of us should commence planning right now for the purchase of extra bonds in this Sixth Drive.

Reports received from some of the larger asbestos firms, via their house organs or news releases, indicate that most asbestos workmen, including office employees, are doing their full share in saving from weekly or monthly payrolls for the regular purchase of war bonds.

Now is the time to stress to your employees not only the importance of this Sixth War Loan Drive, but the opportunity afforded for investment.

Despite much wishful thinking it is doubtful whether the war in Europe will be over before the New Year which means that it is still costly. The fighting with Japan is grim and costly and will become even more so before it is fought thru, in fact it is only just beginning the all out stage. Post-war costs will be heavy too.

Therefore urge your employees to keep their Christmas spending within wartime bounds and use the balance of the money they have set aside for Christmas spending either to buy bonds for their own investment, or as Christmas presents for the family.

Support the Sixth War Loan by Buying Bonds.



BUY
AN EXTRA
\$100
BOND
TODAY



(Th

the

whe

deve

an a

per

fall

cau

pla

squ

da

wil

Mi

Mi

im

60

na

pt

ot of

> ac th

> tl

f

Page 2

ASBESTOS MINING METHODS

(Third and last part of the article by C. V. Smith, which began in September "ASBESTOS")

fore

nay

all

ur-

stos

ate

368,

th-

nly

op-

er

an

it

ut

t-

ce

ng stAs a general statement all open pit operations, where the orebody continues to depth, ultimately reach the point where apexing walls and steep slopes render further development by this method too dangerous. The nature of an asbestos orebody broken up by faults, cracks and slippery faces makes it necessary to guard against frequent falls and slides.

In the mining of asbestos, wood may not be used because wood particles cause much damage in manufacturing plants. This rules out such methods as top slicing and square settings.

In the early days of the King Mine glory holes were recommended but not adopted because they would be dangerous to work and would freeze up in the Canadian winter.

Shrinkage stopes were used successfully at the Beaver Mine (of Asbestos Corporation Ltd.) and at the King Mine, but this system leaves pillars which are practically impossible to wholly recover and where the ore is valuable considerable loss is incurred.

Early in 1930 a pamphlet written by F. W. Maclennan, General Manager of the Miami Copper Company, was published and was carefully studied, in conjunction with other existing data on Block Caving, by the mining staffs of Thetford Mines. It described in detail the mining of copper by this method, by which low costs had been achieved. The system requires a large orebody and one that will cave. The question was—how effectively would the Thetford orebodies cave? Because of their much fractured nature it was thought they would cave satisfactorily in most cases.

The King Mine of Asbestos Corporation Ltd. was the first to adopt Block Caving. They installed this system and commenced drawing in July 1933. Much credit is due them for pioneering the application of Block Caving in the mining of asbestos where special technique in back

filling had to be developed and which is so different from

the porphyries where it had been used.

The Asbestos Corporation Ltd. was so successful in drawing asbestos ore by the Block Caving Method that Johnson's Company were next to follow, and drawing of their ore commenced in November 1940. The Bell Asbestos Mines are in a more favorable position but are going thruthe transitory stage and at the time this article is being written (1944) are preparing for underground mining.

The Canadian Johns-Manville Company, largest of the open pit mines, is making preparations for underground mining by Block Caving on a scale to equal their present open pit capacity.

BLOCK CAVING

This method of mining asbestos is attractive because it has several important advantages:

It permits deep mining.

It permits maximum recovery of orebody.

It permits selection and mixing of ores.

It affords low costs for large scale operations.

It is practically free from interruption under winter conditions.

Thus far this method has been used as a final stage of development. The mines now using it have developed from small beginnings using the cheapest known method and gradually enlarging until a maximum economic depth was reached. Block Caving principles and practices were already well developed, largely by the copper industries before being tried by the asbestos producers, and its application to asbestos mining was therefore less difficult.

There is no reason why Block Caving could not be used for original development if an orebody of sufficient extent were known. The inclination is to strip and use open pit methods which may be cheaper. There exists a fear that fibres would be discolored if overburden is not removed. But if overburden is heavy (exceeding 35 to 40 feet) the cost of removal is great and becomes a burden on operations. If surface drainage is thoroly diverted so the area being mined receives only its own natural precipitation it is quite possible that the cost of stripping

ec

avey HEAT INSULATIONS



from il in that g of estne thru eing

t of

der-

heir

ause

iter

of

om

and

vas

al-

be-

ca-

be

nt.

Ise

ot

40

en

80 e-

g

64

ASBESTOS · MAGNESIA

The CAREY Line includes high efficiency insulating materials of Asbestos and Magnesia for every known service condition-for temperatures ranging from

SUB-ZERO to 2500° F.



Bigh & Med. Pressure.

85% Magnesia-For Hi-Temp Blocks-For Fur-Ovens, Kilns, etc.





Combination Hi-Temp.— 850/0 Magnesia.

Hair Felt Insulation For sub-zero.

CAREYDUCT-

the all-asbestos duct for conveying conditioned air. Combines duct and insulation. Fireproof, sound-deadening, permanent, economical, quickly erected.

INSULATED AND ACOUSTICAL TYPE-

Made of Asbestos Fibre-combines both duct and insulation. Simple slip-joint construction and standardized parts provide easy and rapid fitting on job.

In addition to the insulations shown. Carey makes other Asbestos Specialties -as Plastic and Dry Refractory Cements, Asbestos Paper, Asbestos Millboard, Asbestos Packings. Asbestos Cements, Flat and Corrugated Sheathing. Carevstone Asbestos-Cement Shingles and Siding, Asbestos Fibre.

Wholesalers and Applicators of Insulation Materials - write for details and prices.



THE PHILIP CAREY MFG. COMPANY + Lockland, Cincinnati, Ohio to Canada Tol Pontin Campy Company LTG Cities and Pattery LTMCCAULT ? O

could be omitted and this sum applied to the cost of preparations for underground mining by Block Caving.

To date practically all operating mines have been found by outcrops or surface exposures. There may still be such exposures in areas not yet explored.

There may still be orebodies within the serpentinized asbestos belts as good as the mines now operating. If 80, and they are not exposed, they can be found only by drill-

ing or other underground exploration.

It will become gradually necessary to develop methods which will permit mining of areas now considered marginal or sub-marginal. There are many known cases of this nature, and some of large extent. The present and probably increasing demand for shingle grades with possible improvement in milling practice may bring them into production.

Typical Application of Block Caving to Asbestos Mining. The orebody is divided into blocks of such size that they will cave. Thus far this size is about 160 feet square but modified by circumstances. Height of block is about

300 feet but may go to 500 feet.

A shaft is sunk beyond any possible reach of disturbances from underground mining. Stations, loading pockets and drainage sumps are cut and two drifts are driven to and below the blocks to be mined. The lower or haulage drift is for transporting ore. The upper or grizzly drift (about 54 feet higher) is for transporting men and materials. These are extended under the blocks where there are two grizzly drifts for each haulage drift. Raises are driven, one from each side of haulage drifts up to the grizzly drifts (so called because the top of each is protected by a grizzly with about 16 inch openings.) From these grizzlies double branches are again put up. These when enlarged form the draw points and reach to the undercut. Grizzly drifts are completely timbered with steel sets of 6 inch H beams and thoroly concreted. Openings are left at the draw points.

Raises at block corners, and known as corner raises, are driven from the nearest draw point. As these raises advance fringe drifts at 30 to 40 foot vertical intervals are

ASBESTOS

prebeen

still ized

rill-

10ds

nar-

this

pro-

pro-

stos

hat

lare

out

irb-

cets to

age

rift

ind

ere

are the

om ese

the eel are

ses are in the all-out drive for Victory

In every important war industry and in the production of almost every vital unit of military or naval equipment one or more of Johns-Manville's 1200 products is being used. Twenty-four hours a day, seven days a week they are pouring forth from the J-M factories . . . helping to hasten the ultimate victory that will assure the continuation of the free way of life that has made America great.

Johns-Manville owns and operates Asbestos Mines in Arizona and Canada, fifteen factories located strategically across the continent, sales offices in all large cities and a large, scientifically equipped research laboratory in which J-M Engineers and Scientists are constantly developing new uses for this remarkable mineral, Asbestos.

For complete information on J-M Asbestos Products or raw asbestos in a wide range of grades and fiber lengths, write to any J-M office or distributor.

JOHNS-MANVILLE

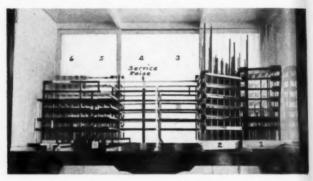
EXECUTIVE OFFICES: NEW YORK



Branches in All Large Cities

driven around the block. These provide a plane of weakness on block lines and are sliced at floor and back in strong ground to further weaken the block line.

When haulage raises and loading chutes, grizzly drifts, grizzly and finger raises are fully developed the undercut is made. This is a series of drifts 7 x 7 on 20 foot centers parallel to grizzly drifts and 20 feet above grizzly floor. Thirteen foot pillars remain. The sides and roof of the 7 x 7 drifts are drilled, draw points fully enlarged to provide for expansion and when all is ready the drill holes are loaded and blasted either entirely or by sections. This may require as much as 20 tons of dynamite. Blasting the undercut leaves the whole block unsupported. It is the strain of this unsupported load which causes caving.



Model of Block Caving—Johnson's Company. Blocks 1, 2, 5 and 6 are being drawn. Glass tubes filled with brick dust indicate original height of ore at each draw point. As ore is drawn the brick dust is drawn off. Drawing in No. 1 is nearly finished; No. 2 has just been started; blocks 5 and 6 are roughly half drawn.

Horizontal and vertical black lines represent completed fringe drifts and raises. White lines show proposed work. A cage in the service raise gives easy access to all levels.

This blasted rock fills all the draw points and overflows into the grizzly drifts and haulage chutes. It is drawn off leaving vacancies where the roof is unsupported.



"ASBESTOS" - November 1944

eakzin in zzly the foot zzly of d to oles the the

ndi-

wn

ed:

nalf

ted

er-

is ed. 945

Page 9

By natural caving the roof falls by successive spawling or by settlement of block thru the line of fringe drifts. At grizzlies boulders too large to pass are blasted.

As the block settles backfill from mill tailings is placed from surface to support the exposed walls of ad-

joining blocks and contiguous surface areas.

Backfill is not needed to cause caving. It is used to avoid disturbance of adjoining properties or permanent surface structures, to prevent freezing in the underground and to support walls of undeveloped blocks. Backfilling on

top of clean ore is to be avoided if possible.

In drawing ore considerable care should be exercised to draw uniformly thruout the block. Where hard spots exist these must be drilled and blasted so the block may not be held up at that point. The aim is to cause uniform settlement of the block and, likewise, uniform settlement of the backfill. If sections of the block are overdrawn the backfill of tailings or sand may work down and be drawn with the ore causing dilution. If dilution is excessive operations become unprofitable and ore will have to be left which might have been drawn but for dilution.

Thus dilution and possible loss of ore are an unfavorable factor of Block Caving and must be carefully controlled.

If there is overburden there is always some dilution and consequent loss of ore.

Full details of Block Caving and as applied to asbestos mining can be had by reference to the following published articles:

F. W. Maclennan, Tech. Pub. No. 314, A. I. M. & M.

Block Caving at the King Mine of Asbestos Corporation Ltd., Can. I. M. & M., April 1934.

Notes on Block Caving at the King Mine of Asbestos Corporation Ltd., Can. I. M. & M., November 1935.

King Mine No. 3 Shaft and Equipment, Asbestos Corporation Ltd., Can. I. M. & M., March 1939.

Caving at Johnson's Asbestos Mine, Can. I. M. & M., September 1941.

The writer wishes to acknowledge the cooperation of officials of the companies herein mentioned for permitting reference to their operations.



Manufacturers of a complete line

ASBESTOS-CEMENT SHINGLES ASBESTOS ELECTRICAL MATERIALS ASBESTOS-CEMENT PIPE AND BLOCK INSULATION ASBESTOS PACKINGS ASBESTOS CORRUGATED

ig or - At

ad-

nent und g on ised pots nav

orm ent

the

wn

sive

be

01-

on-

ion

as-

ng

on

or-

ra-

p-

of ıg

44

ASBESTOS-CEMENT SIDING ASBESTOS-CEMENT WALLBOARDS ASBESTOS MARINE INSULATIONS ASBESTOS AND MAGNESIA PIPE ASBESTOS PAPER & MILLBOARD **ASBESTOS TEXTILES** ASBESTOS LUMBER ASBESTOS ACOUSTICAL MATERIAL

> Today, all of these K&M products are playing an important role in the War Program; contributing in many different ways to its ultimate success. For the duration, the Nation will continue to have first call on all K&M plants and employees.

> Nature made asbestos. Keasbey & Mattison has made it serve mankind . . . since 1873.

KEASBEY & MATTISON COMPANY, AMBLER, PENNA.

TREATMENT OF ASBESTOS ORES

Briefly the process is as follows:

With open pit mining it is sometimes possible to avoid removal of barren areas but, generally speaking, the whole orebody is mined. It is therefore necessary to make a rough separation of ore and barren rock in the pit. Barren rock goes to the dump and ore to the crushers. In the earlier days of manual labor rock was blasted to man-size pieces and a good separation of crude, mill ore and barren rock could be made. With the larger tonnage now required to meet the demand mechanical handling is necessary. For a long time this was thought impractical because it did not permit full recovery of valuable crude fibre.

Crushers with openings as small as 15 inches by 30 inches were used for the man-size rock. As production increased the crushers changed to 24 x 36 or 36 x 42 and now 48 x 60 is a common size. Such a machine weighs about 200,000 pounds.

After primary and secondary crushing to 3 inches and less, barren rock is partially removed, the ore is dried and goes to a large dry rock storage. This storage serves as a balance wheel and surge and blending bin between mining and milling. The mills further reduce the rock by successive crushing. Fibre is separated by aspiration, graded according to length, bagged in 100 to 125 pound bags and stored for shipment.

Reprints of the article on "Asbestos Mining Methods" will be available about January 15th, at a price of 25e each, with a discount on quantity orders.



TEST

. . . the added sales volume awaiting you among the nation's roofing and siding contractors. Write to . . .

AMERICAN ROOFER and SIDING CONTRACTOR 425 Fourth Avenue, New York City UNION ASBESTOS

MEANS PROGRESS IN INSULATION

AND RUBBER CO.

roid nole ugh ock lier ces ock to

lid

30

in-

ut

nd nd

e-

INSULATION FOR MARINE, RAILROAD, AVIATION AND INDUSTRIAL USE



TWO ARMY-NAVY "E" AWARDS FOR EXCELLENCE IN WAR PRODUCTION ONE TO THE CICERO, ILLINOIS PLANT; ONE TO THE PATERSON, N. J. PLANT

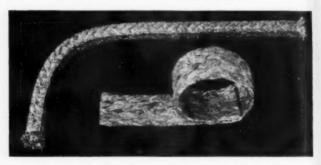
UNION ASBESTOS & RUBBER COMPANY

Offices, CHICAGO, NEW YORK, SAN FRANCISCO . Plants: CICERO, ILL., BLUE ISLAND, ILL., PATERSON, H. J.

INCONEL--A New J-M Packing

A new type of flexible metallic packing capable of withstanding temperatures up to 2000° F., and highly resistant to corrosive gases, alkalies, and most acids, has recently been announced by Johns-Manville. Known as Inconel, and of a construction and toughness adapted to many industrial uses, this new packing owes its existence to the need for a material which would stand up under the exacting and destructive conditions existing in the exhaust systems of airplane engines equipped with turbo-superchargers.

In this service, flexible connections are necessary to absorb vibration between stationary and moving parts of the exhaust system. At the same time, these connections must prevent leakage of the exhaust gases which, due to low atmospheric pressures at high altitudes, have a greater tendency to seepage with the possibility of injuring equipment or contaminating the cabin air supply.



No existing material was adequate to meet these unusual conditions until J-M engineers produced Inconel Packing. Made of a nickel-chromium iron alloy in wire form, which is first knitted into mesh and then braided, the finished product has proved ideally suited to the service for which it was intended. In addition to its high corrosion and temperature resistance, the new packing is strong, resilient and both non-scaling and non-magnetic.



of re-

re-

as

to

er

he

10-

to

of

18

0

P

It is available in a number of styles, including square section packing in coil and tape forms, from which ring type gaskets may be formed. One style is made with asbestos fibres interwoven with the metallic alloy and serving as a sealing agent.

It is expected that this new packing, created to fill a specific need in connection with the war program and now available for industrial use, will find a multitude of applications where exceptional heat resistance and the ability to withstand corrosion are important considerations.

OVENS USE ASBESTOS-CEMENT SHEET

Thousands of baking and roasting ovens manufactured by the G. S. Blodgett Company of Burlington, Vt., and used thruout the country in army camps, hospitals and industrial cafeterias, have an asbestos product in their construction. This is asbestos-cement in sheet form. The Blodgett firm is the leading manufacturer of this type of oven in the country, great numbers of them also being used by bakeries, hotels and restaurants all over the land.

The asbestos-cement sheets (3/8" thick) are used for shelves in the ovens and also for cooking tops of flat-top ranges. Temperatures in the ovens run as high as 600° F., which is within the limit temperature of this product.

The asbestos-cement sheet was used by the Blodgett Company prior to 1940, but at that time it was discontinued in favor of steel. When the war came along the steel plate shelf was dropped in order to conserve the steel.

An advantage of the abestos-cement shelf seems to result in more uniform bottom baking, and while of course it is not as strong as the steel plate shelf, Robert F. Patrick, manager of the Blodgett Company's oven department says that replacements are surprisingly low. When steel is again available the asbestos-cement sheet may be edged with a band of steel, improving both the strength and appearance.

BUY WAR BONDS AND STAMPS

ASBESTOS

IRPORATION



THETFORD MINES

QUEBEC

eepe BO

CANADA

REPRESENTATIVES

GREAT BRITAIN:

W. A. JANITCH.

6 Maresfield Gardens, London, N. W. 3

U. S. A .:

BALTIMORE, MD.: WALLACE & GALE CO., 115 South Gay St.

CLEVELAND, OHIO:

... WORLD'S PRODUCTS TRADING CO.,

Rockefeller Bidg.

CHICAGO, ILL.: ALBERT E. STARKIE CO., 5461 W. Division St., Chicago, Ill.,

NEW YORK, N. Y .: WHITTAKER, CLARK & DANIELS, INC.,

260 West Broadway SAN FRANCISCO, CAL .: L. H. BUTCHER CO., 15th and Vermont Sts.

CANADA:

MONTREAL, QUE .: ATLAS ASBESTOS CO., LTD.

110 McGIII St.

TORONTO, ONT.:CANADIAN ASBESTOS ONTARIO LTD.

14 Front St.

MARKET CONDITIONS

GENERAL BUSINESS

"For two years", says the National City letter for October, "something like two-thirds of industrial capacity and almost half of the total economic activity of the country have been devoted to war purposes. Now a major change is in prospect. It may come within a few weeks or not for several months, but it is already the first consideration in current business decisions."

At the time we write this there does not seem much prospect of total victory in Europe before next spring at the earliest, but even tho it does not come for six or more months, business is planning for post-European war as undoubtedly war production will be cut back 25, 30 or perhaps 40% when Germany is defeated.

When the cut does come, or even before, many businesses will turn to civilian production and the chief factors in business will then be merchandising ones—cost, selling price, demand, supply. For the last few years practically no attention has been required for selling—either the whole output of factories was taken by one buyer—the Government—or else the goods made were such that the retailers had difficulty in keeping enough materials on their shelves to supply the demand.

Advertising, even this early, is preparing the way for postwar selling—building up a demand now which will make selling easy when civilian products can again be offered. Turn to any national magazine and read over the advertisements—most of them tell of products which will be available after the war. Advertising indeed is one of the cushions to lessen the shock of conversion from war production to peacetime merchandising.

ASBESTOS- RAW MATERIAL

No important change in this market. Grades of all kinds are now reaching the American market to take care of our immediate needs. Prices are firm but there will be no change for the balance of the year.

As to the future—there are now eleven or twelve as-

ASBESTOS

or

re n-

sirs ng ly he

he

or ill he ill

all

re be

1S-

Canadian
South African
Rhodesian

RAW ASBESTOS DISTRIBUTORS

SPOTLAND ROCHDALE - LANCS - ENGLAND



INCIDENA

Nothing can stop brave men and stout ships from begth

Thanks to the United Navies' valor and skill, fewer and fewer cargo vessels fall victim to skulking wolves of the sea. But when an enemy torpedo strikes—to pause, even for a moment, may place in further jeopardy other human lives and precious cargoes—cargoes of basic materials, like raw Asbestos, so vitally necessary for National Defense.

From Africa, Russia, Australia—laden ships converge on American ports. Heedless of danger and death — obedient



ASBESTOS

8 WEST 40th STREET, NEW YORK, N. Y. . JOHANNESBUUT

EVERY TYPE OF RAW ASBESTOS CARRIED IN STOCK: ARIZONA * AUSTRALIAN * BOLIVIAN * CAN CHIP Manufacturers of Asbestos Cement Board and Cyprus Asbestos Siding . . . Creators to the



ENAT SEA

omby the RAWASBESTOS vital to Industry and Victory



to duty — they fight through to discharge their cargoes. America's defense and American industry continue to be served by this invaluable mineral for many indispensable uses. For each industrial and defense need, there's a special Asbestos precisely suited to the job. And as long as men have brave hearts and stout vessels — America's Asbestos requirements will continue to be filled.

Any inquiries on raw Asbestos will be answered promptly.

ITED INC.

NESBUDUTH AFRICA . . . WORKS: MILLINGTON, NEW JERSEY

CANECHINESE - CYPRUS - INDIAN - RHODESIAN - RUSSIAN - SOUTH AFRICAN BLUE AND YELLOW
 Resulfacturers of New Era Insulation, lightest rigid insulation for all temperatures

JOHNSON'S COMPANY

ESTABLISHED IN 1875

Head Office
Thetford Mines, P. Q., Canada

Mines

Thetford Mines, Quebec Black Lake, Quebec

4EOCE

Producers of All Grades of RAW ASBESTOS

AGENTS

GREAT BRITAIN	A. BRAZIER & CO. 203 Winchmore Hill Road London, N. 21, England
CHICAGO 4, ILL,	GRANT WILSON, INC. 141 West Jackson Boulevard
NEW YORK, N. Y.	CONNELL ASBESTOS MFG. CO. 165 Clymer Street Breeklyn, N. Y.
SAN FRANCISCO, CALIF.	LIPPINCOTT CO., INC.

when mall per asbe all t

Am Eu mer equ

age gra

the tha eit de be

An Til

AS

re st

1 8

-

bestos cement manufacturing plants in South America where there were only three before the war. Europe normally consumes about 30,000 tons of Canadian asbestos per year. At the present time the demand for Canadian asbestos without the European market is sufficient to keep all the mines operating at full capacity, and they ship their complete output. After the war, when the South American plants are really operating at capacity, and the Eu opean demand comes in again, while the asbestos-cement products required in this country will probably be equal to the present production now curtailed on account of the labor shortage, there may easily be a definite shortage of asbestos fibre. This, of course refers to the shingle grades of fibre.

As to crudes and spinning, there may be a surplus after the war. Asbestos textile plants have so increased their capacity in the struggle to supply war requirements, that these plants may be able to operate at only 50% capacity after the war, unless new uses for asbestos textiles are developed—which seems likely as several new uses have been found during the war period.

ASBESTOS - MANUFACTURED GOODS

Asbestos Textiles. There is little or no change in the Asbestos Textile market over that of the previous month. The Navy demand is still high and it appears that it will continue to be so for months to come. In fact the combination fibrous glass and asbestos cloth has been a godsend in relieving the demand for lagging cloth used over pipe insulation by the Navy. Practically all of the major textile companies are now producing this cloth.

The demand for products made from textiles, such as

facings and packings, is greater than the supply.

As everyone knows a large proportion of the textile capacity of the country has been and is going into implements of war, which naturally means a decline in demand after V-E day and when Japan is defeated, there will be a drastic cut to a figure far below the war-expanded capacity of the industry. Navy and Maritime requirements, however, will continue for some time after the war as ships will not only have to be completed, but most of them will

need complete overhauling.

In this market especially it is necessary to find new uses, improve products, and seek publicity for both new products and old ones.

contin

indus

five I

heavy

tory

the F

and i

in th

run

ther

limi

shor

tens

field

cem

tro

ger

cei

spe

wel

te

M

tie

m

ti

r

Brake Lining. The brake lining market is described as "increasing" with production level and prices steady.

Sales for September 1944 from all sources increased to a considerable extent over last September but the increase over the previous month was not as high. Domestic consumption sales were the highest on record when compared with the same month in the previous ten years. The same holds true when the first nine months of this year is compared with the similar period in the previous decade.

Export sales recorded increases not only over the same month in 1943 but also over the previous month.

Asbestos Paper and Millboard. The market for asbestos paper depends largely on dwelling construction and general industrial expansion. Under present conditions demand can be described as good. "The future market" says one reader, "should be somewhat more active than pre-war business as air conditioning and warm air furnaces have grown in popularity. New uses for asbestos paper developed during the past several years should also provide new markets not heretofore open to the Industry."

The market for asbestos millboard in post-war time will depend largely on industrial and residential construction. Millboard has been used in several new products which should continue and very likely increase after the war is over.

Insulation. Low Pressure. Requirements in this market are light at present. Some of the manufactuers believe that the low pressure market will be active after war needs are over because of residential and apartment house building which may exceed any previous record, in fact this opinion seems to be general thruout the Industry.

Insulation. High Pressure. The demand for high pressure insulation is being maintained at an even keel. There appears to be a growing market for High Pressure Insulation in the maintenance field in industry and this should continue during the winter months, coupled with the

continuing demand for the materials in the shipbuilding industry.

new

new

las

sed

in-

stie

he

is

е.

he

as-

nd

ns

. 27

in

es

er.

0-

0

3.

s e

8

One manufacturer reports a backlog of approximately five months for pipe covering, altho block and cement demand is light. Undoubtedly the requirements will continue heavy so long as the war continues in any area. When victory arrives there will no doubt be a heavy drop and later the pick-up will depend upon the extent of reconversion and industrial expansion.

Asbestos-Cement Products. No change in the situation in this market during the past month. Orders continue to run far in excess of production and it does not look as the there would be any seasonal letdown with production limited by the amount of labor available.

Construction generally is being held up by the lumber shortage and this has somewhat slowed wallboard sales.

Postwar prospects are good; the reroofing and maintenance market should be steady and new non-industrial fields will undoubtedly use corrugated and flat asbestoscement sheets in large quantities.

Asbestos cement pipes are affected by wartime controls; after those are removed the market will depend upon general economic conditions.

These various comments are compiled from information received from various executives closely in touch with the respective fields. Comments from any of our readers are always welcome.

A. S. T. M. TEXTILE STANDARDS

The 1944 edition of the Standards on Textile Materials issued by the American Society for Testing Materials thru the work of its Committee D-13 on Textile Materials, includes the more than 75 standard specifications, tests and definitions developed by the Society and much other pertinent related information. The specifications cover asbestos, bast and leaf fibres, cotton, glass, rayon and silk, wool and others.

The book is available from A. S. T. M. Headquarters, 260 S. Broad St., Philadelphia 2, Pa., at \$2.75.



CONSTRUCTION BUREAU

A Construction Bureau is being established within the War Production Board, responsible to Hiland G. Batcheller, Operations Vice Chairman. The bureau will be headed by Arthur J. McComb of Montclair, N. J., who has been serving as director of the Office of Industry Advisory Committees.

The Construction Bureau will include the existing Building Materials Division, the Construction Machinery Division, the Plumbing and Heating Division, and the bulk of the Facilities Bureau which is being abolished.

A Bureau Requirements Committee is being established to pass on all construction requirements and construction programs and all major construction projects. It will also review the requirements of the divisional requirements committees of the component divisions of the Construction Bureau.

BUILDING

Total new construction activity in the entire United States amounted to \$323,000,000 in September 1944, a 4% decline from the August volume, and 44% under the level of September 1943.

Of this total privately-financed work amounted t \$129,000,000 for September; public work totaled \$194,000,000.

New housing activity, both private and public, amounted to \$51,000,000 in September which was 7% decline from August and 55% under the \$113,000,000 volume of September 1943.

September work brought the total new construction volume for the first nine months of 1944 to \$2,905,000,000. Of this total \$1,127,000,000 or 39%, was privately-financed. During the same period in 1943, total activity amounted to \$6,409,000,000 of which \$1,185,000,000, or 18%, was private work.

The construction industry will have the capacity to produce about 350,000 homes during the first twelve months after the defeat of Germany.—T. Oliver Morgan, General Manager, Home Owners' Catalogs.

The task of putting the nation's 37,500,000 homes, neglected of necessity during the war, back in a state of good repair will be the Number One job of financial institutions and the allied building industries in the immediate post-victory period.—Abner H. Ferguson, Commissioner of the Federal Housing Administration.

2"

3/3/2

1

90

fo

E

SERIES 150 1500LB. FLANGES

War peraur J. ector ding the ities d to proiew s of

rom 943.

me of

he ne

ed

ed

er

·8-

44

PIPE SIZE	METAL AREA	/"	11/2"	2"	21/2	3"	3/2"	4"
1/2"	81	1.45	1.97	2.49	3.01	3.53	4.05	4.58
3/4	.89	1.56	2.09	2.63	3.17	3.71	4.25	4.79
1"	1.05	1.78	2,33	2.88	3.44	4.00	4.56	5.12
1/4	1.19	1.87	2.44	301	3.58	4.15	4.72	5.29
1/2"	1.47	2.25	284	3.43	4.02	4.61	5.21	5.81
2"	2.10	2.78	344	4.10	4.77	5.44	6.11	6.78
2/2		3.29	4.00	4.71	5.42	6.13	684	7.56
3	2.95	3.75	4.50	5.25	6.00	6.75	7.50	8.25
3/2	3.31	4.16	4.94			7.28	8.06	8.85
4"	3.92	4.89				8.23	9.07	9.91
5		6.50			9.32	10.26	11.21	12:16
6"		7.14				1	11.98	12.95
7"	1			10.32	11.35	12.38	13.41	14.44
8					13.12	14.23	15.34	16.45
9						16.38	17.56	18.75
10			14.51	15.70	16.89	18.08	19.27	20.46
12"		15.97	17.49			22.08		25.14
14				23.34	24.83	26.3	27.83	29.33
16			25.51	27.17	28.84	30.51	32.18	33.85
18								39.35
20	Mr.							43.89
24								57.25

The figures given in the seven columns to the right denote sq. ft. areas at thickness in top line from metal. Use metal area for first layer of blocks.

This is the sixth in the series of Area Tables compiled by Elbert R. Sitton,



Canada.

Below are given figures prepared and released by the Mining. Metallurgical and Chemical Branch of the Dominion Bureau of Statistics, covering Production of Asbestos in Canada, by months for 1940, 1941, 1942 and 1943. These are the latest revised figures. They will bring your tabulations on Production of Asbestos in Canada uptodate.

	1940	1941	1942	1943
	Sho	rt Ton	ns — 200	00 lbs.
January	26,669	30,878	31,215	32,541
February	21,340	31,090	32,346	36,161
March	24,938	32,060	36,692	40,275
April	30,468	31,627	32,589	33,358
May	27,402	38,478	37,859	48,867
June	25,741	45,484	39,053	43,487
July	30,362	44,442	39,375	43,767
August	32,001	48,320	42,020	40,059
September	30,460	45,610	37,055	39,252
October	34,731	42,607	40,416	33,911
November	33,708	42,494	38,456	38,989
December	28,985	44,756	32,383	36,529
	346,805	477.846	439,459	467.196

Africa (Union of South)

From South African Mining & Engineering Journal

From South African Mining & Engineering	Year 1943	
Т	ons (2000 lbs.)	Value
Transvaal	,	
Amosite	26,936	£583,424
Blue	1,965	55,797
Chrysotile	1,269	26,071
Cape		
Blue	7,975	248,467
	38,145	£913,759

The 1269 tons of Chrysotile sold in the Union during 1943 were classified as follows:

Crude (run of mine)	807	short	tons
Shingle Fibre	425	short	tons
Paper stock and fillers	37	short	tons

1,269 short tons

J.

F

A

J

NEWS OF THE INDUSTRY

BIRTHDAYS

Min.

rean

. by

atest

ction

71

9

3

- J. A. Marcotte, General Sales Manager, Asbestos Corporation Limited, Thetford Mines, P. Q., November 22.
- F. R. Anderson, Vice President, Sall Mountain Co., Chicago, Ill., November 24.
- Alvin C. McCord, President, McCord Radiator & Mfg. Co., Detroit, Mich., November 24.
- John J. Krez, President, Paul J. Krez Co., Chicago, Ill., November 26.
- Alfred E. Hermes, Secretary-Treasurer, Acme Asbestos Covering & Flooring Co., Chicago, Ill., November 27.
- W. C. Ignatius, Secretary-Treasurer, Philip Carey Mfg. Co., Lockland, Cincinnati, Ohio, November 27.
- Frank N. Grossman, Secretary, Arnold Insulations, Inc., Chicago, Ill., November 28.
- E. T. Connell, President, Connell Asbestos Co., Brooklyn, N. Y., November 29.
- S. P. Moffit, Vice President and Director, The Ruberold Co., New York City, November 29.
- R. E. Kramig of R. E. Kramig & Co., Cincinnati, Ohio, November 29.
- K. H. Behr, Secretary, The Ruberoid Co., New York City, December 5.
- Victor Mauck, President, Nicolet Asbestos Mines, Norristown, Pa., December 6.
- Kenneth MacLellan, Managing Director, George MacLellan & Co., Ltd., Glasgow, Scotland, December 8.
- John C. Camp, Vice President, Southern Friction Materials Co., Charlotte, N. C., December 13.
- Joseph Poulin, President and General Manager, Asbestonos Corporation, Ltd., St. Lambert, Montreal, P. Q., Dec. 15.
- L. J. Silverman, Executive Vice President and Treasurer, Union Asbestos & Rubber Co., Chicago, Ill., December 16.
- W. Paul Doud, of Doud Insulation Co., Philadelphia, Pa., December 17.

To all these gentlemen we extend congratulations and best wishes on the occasion of their birthdays.

WANTED

First-class man for sales and engineering work in Contract Department California Insulation House. Prefer engineering graduate, age 35-45, with at least six years' experience. Salary open. Position vacant. Reply by letter stating experience and salary expected and availability. Also be prepared to give references.

Box 10W-S, "ASBESTOS", 17th Fi., Inquirer Bidg., Phila., 39, Pa.

ASBESTOS CEMENT PRODUCTS ON THE AIR

Launching a new phase of its publicity program, the Asbestos Cement Products Association has introduced a service which will result in focusing attention on asbestos cement building materials thru farm programs broadcast by the nation's radio stations.

The service consists of a series of monthly scripts, each containing a variety of news and educational items concerning worthwhile uses for asbestos-cement products on the farm. Each script is written so that it can be incorporated easily into the stations' established farm broadcast.

Within a week after the first offering of the service to stations, more than 70 broadcasters had written in asking exclusive rights for the scripts in their cities. In addition, the Blue Network requested the material for use on its "Farm and Homemakers" program, which is carried over 71 stations. Additional requests are being received daily, and it is expected that the total, exclusive of the network, will soon exceed one hundred.

The first script cautioned farmers about the need for sound roofing and siding as a protection against winter weather, and recommended that reroofing and residing be done with asbestos cement products for the sake of fire protection and other advantages. It also described the value to be obtained from a winter vestibule built of asbestos cement board. Another script told how a closet for work clothes could be built into the home, using asbestos cement board for a lining. Fire Prevention Week and the importance of asbestos cement construction in preventing fire losses were the topics of a third script.

The programs upon which these scripts are being broadcast have listeners totaling several millions, so their value can easily be appreciated.

The scripts are released under the title "Farm Air-Grams." Preparation and distribution are handled by the Lawrence H. Selz Organization of Chicago, publicity counsel for the Association.

SOUTHWESTERN ASBESTOS CORPORATION. The War Production Board and the Defense Plant Corporation have stopped all work on the custom processing plant and the Pine Top asbestos mine in Arizona. This project has been operated by the Southwestern Asbestos Corporation, J. S. Michault, Globe, Ariz., general manager. The custom processing plant was to treat asbestos ore being mined in the Globe area of Arizona, and was planned to have a capacity of 25 tons daily. J. S. Michault is now in the Army.

BLUE ASBESTOS

AR

Vice

nent na-

ing rm.

nto

to ex-

he

nd lded ne

nd

d-

The Cape Asbestos Company, Ltd., is the world's largest supplier of acid-resistant blue crocidolite asbestos, and the only manufacturer operating its own mines. Inquiries solicited on:

MILLBOARD YARNS
ROVINGS POWDER CLOTHS
PROCESSED FIBRES
Unexcelled for use in
ASBESTOS CEMENT PIPES

AMOSITE ASBESTOS

This fibre owing to its great length and bulk is unrivalled for use as an insulating medium in:

Asbestos mattress filler 85% Magnesia insulation

The CAPE ASBESTOS CO. Limited Morley House, 28-30 Holborn Vinduct, London, E.C.I. FACTORY, BARKING, ESSEX

United States Sales Agent:

ARNOLD W. KOEHLER

415 LEXINGTON AVE.

NEW YORK CITY

TELEPHONE - VANDERBILT 6-1477

JAMES S. DOYLE PRESIDENT B. L. M. A.

James S. Doyle has been elected president of the Brake Lining Manufacturers' Association, Inc., and will direct a nationwide campaign actively supported by the Association urging greater safety on the highways. Figures compiled over the past



James S. Doyle

ten years disclose the average number of automobile fatalities per year was greater than the number of Americans killed in combat during the entire two years of World War I. RAY

publis

beauti

scribe

many

and c

its er

of th

inter

porta

prese

HOL

temb

\$77.7

due

curt

1944

heca

Sale

Exp

EA

CO

p

educa

Mr. Doyle, who is staff manager of Johns-Manville automotive department with headquarters at New York, has been treasurer of the association for the past three years.

After attending Dartmouth College, Mr. Doyle took post graduate work at Columbia, joining Johns-Manville in 1928

as sales manager of the electric railway and bus department. He was appointed automotive staff manager in 1940. He is a member of the New York Railroad Club, Dartmouth Club and Psi Upsilon Fraternity Club.

RAYBESTOS WINS DMAA AWARD

The Raybestos Division of Raybestos-Manhattan, Inc., Stratford, Conn., was awarded a prize at the Annual Meeting of the Direct Mail Advertising Association held in New York City on October 20th.

Raybestos won this honor on its employee-serviceman house organ, The Firing Line, which was judged among the fifty best promotional campaigns of the many participating.

The exhibit presented the definite objectives strived for by the publication in keeping the serviceman informed, in reducing absenteeism, in stimulating war production, in increasing results in drives for war bonds, community chests, blood donors, safety, and health by increasing participation in the many sports activities made available.

THE PHILIP CAREY MANUFACTURING COMPANY has appointed Roy S. Durstine, Inc., New York and Cincinnati, to handle its advertising. Marketing plans are now in preparation.

"THE STORY OF GATKE BRAKE LININGS", one of a series of articles running in Brake Service (published at 31 N. Summit Ave., Akron, Ohio) appeared in the October 1944 number of that publication.

RAYBESTOS GOOD FELLOWSHIP

rake

na-

zing Dast

r of

Was

ans

two

ent

en

ge,

at

28

at.

8

nd

The Raybestos Division, Bridgeport, Conn., has recently published as a tribute to its employees, an 11 x 14 inch brochure, beautifully printed in five colors, which illustrates and describes the educational, athletic, hospitalization, social and many other programs fostered at Raybestos to help promote and cement friendly, human relations—good fellowship—among its employees.

The work of the Raybestos War Production Committee in educating the employees on the ultimate uses and importance of the materials which they produce, thus quickening their interest and improving the quality of their work, occupies important space in the brochure. A copy of the brochure has been presented as a gift to all employees.

JOHNS-MANVILLE operations for the nine months ended September 30, 1944, showed sales of \$76,062,459.69 compared with \$77,720,158.80 in the same period last year. The decline was not duck of orders but to severe manpower shortages which curtailed production in almost all of the Company's plants.

Earnings for the nine months period were \$3,911,075 in 1944, compared with \$3,195,528 in 1943. Earnings were higher because of a smaller provision for war contingencies in 1944.

Detailed figures follow:	Sept. 30, 1944	Sept. 30, 1943
Sales, less cash disc., allowance	\$76,062,459.69	\$77,720,158.80
Raw Materials, etc.	32,839,111,28	28,917,374.09
Wages and salaries Depre. and depletion (of machinery.	29,467,797.16	32,455,575.61
buildings and mineral properties	1,465,335.60	1,991,211.01
Contingencies - war conditions	700,000.00	2,280,000.00
Taxes	7,679,139.77	8,880,470.07
Total Expenses	72,151,383.81	74,524,630.78
EARNINGS	3,911,075.88	3,195,528.02
Equal after required preferred dividends to a profit per common share of	4,55	3.61

Sales for the third quarter only were \$26,303,197.51 in 1944, compared with \$26,692,498.71 for the third quarter of 1943. Net earnings for the third quarter of 1944 were \$1,217,318.64 compared with \$1,048,607.29 in 1943.

SIR SAMUEL TURNER, who has been a director of Turner and Newall since the formation of the company in 1920, and its chairman since 1929, has, according to the India-Rubber Journal, resigned as chairman, as of October 1, 1944. The Board has appointed W. W. F. Shepherd, the present deputy-chairman to be chairman as from that date. Sir Samuel, at the special request of his colleagues, has agreed to remain a director for the time being, and to accept appointment as deputy-chairman in place of Mr. Shepherd.

THE MINING JOURNAL, Phoenix, Ariz., is publishing in its November 15th issue an article by Lincoln A. Stewart, Project Engineer, and J. H. Hedges, District Engineer, Western Region Bureau of Mines, Tucson, Ariz., discussing asbestos deposits in Arizona. In 1943 the Bureau of Mines conducted underground exploration at four asbestos properties in Arizona. This work resulted in opening reserves estimated to yield over 2000 tons of fibre, of all grades. The article gives data as to the geology of the Arizona deposits and also factual information on the working of them.

Copies of the Mining Journal containing the article are available from the publishers at a price of 20c each or from us at the same price from a small stock kept for the convenience

of our readers.

LT. COL. J. G. ROSS, who recently retired from the active management of Asbestos Corporation Limited, Thetford Mines. is spending the winter at Nassau in the Bahama Islands.

J. E. COLE. Chief of the Packing and Gasket Section, Cork. Asbestos & Fibrous Glass Division of the War Production Board. has resigned to return to Raybestos-Manhattan, Inc. Ray Coultrap is now handling the allocations under Order M-283 and is the administrator of that Order.

"NON-METALLIC FIXTURES CONSERVE ENERGY IN DUCTION HEATING" an article by Frank W. Curtis, Consulting Engineer, Induction Heating Corporation, appeared in the American Machinist-October 12, 1944 issue-and numerous ways in which asbestos board can be used to make economical work-holding fixtures for all types of induction heating for joining and localized hardening. American Machinist is published by McGraw-Hill, 330 W. 42nd St., New York City, where copies of the October 12th issue would no doubt be available.

THE RUBEROID CO., reported for the three months ended September 30, 1944, net profit of \$185,429, equal to 47c per share, after providing for all taxes and a reserve of \$30,000 for wartime contingencies, compared with \$148,638, equal to 38c per share, for the third quarter of 1943. Net sales in the third quarter of 1944 amounted to \$7,379,605, compared with \$7,554,601 in the corresponding period last year.

For the first nine months of 1944, net profit, after providing for all taxes and a reserve of \$90,000 for wartime contingencies, amounted to \$543,760, equal to \$1.37 per share, compared with \$399,204, equal to \$1.00 per share in the like period of 1943. Net sales in the first nine months of this year amounted to \$21,506,-555, compared with \$20,026,802 in the corresponding period of

1943, an increase of \$1,479,753, or 7.4 per cent.

Post-war refunds of Federal excess profits taxes amounting to \$25,000 and \$74,600 are included in the net earnings reported

CAROLINA ASBESTOS COMPANY

CUSTOM MANUFACTURERS OF

ASBESTOS TEXTILE PRODUCTS



CAROLINA ASBESTOS TEXTILES

ARE COMPLETELY ENGINEERED FOR MODERN REQUIREMENTS IN THE MANUFACTURE OF SAFETY-CLOTHING. ELECTRICAL HEATER-CORDS. DRYER-FELTS. PLASTICS AND MANY OTHER PRODUCTS REQUIRING THE USE OF ASBESTOS TEXTILES.



ASBESTOS YARN - CORD - CLOTH ASBESTOS ROVING - TUBING - WICKING ASBESTOS CARDED FIBRES - LISTING TAPES OIL BURNER WICKING

CAROLINA ASBESTOS COMPANY

EXECUTIVE OFFICES:

in its roject gion osita ound Work

tons ology

rom ence tive nes,

A8ard. oul-

i is

IN-

ulthe

W8

ke at-

is v. il-

f-

е,

e g

DAVIDSON, N. C.

FACTORIES: DAVIDSON, N. C. MARSHVILLE, N. C.

"ASBESTOS" - November 1944

Page 35

for the third quarter and for the first nine months of 1944, respectively.

130°F.

magnes

carbon

10, 194

Texas,

and C:

descri

liam S

Cleve

under

reque

Gran

Halst

porti

resin

ed (

amo

on (

App

of l

ing

arm

of 1

in t

one

the

cid

str

wh

lio

As

A

Pil

THE PHILIP CAREY MFG. COMPANY announces the following appointments: George B. Johnston as General Merchandising Manager. Mr. Johnston was formerly Manager of the Marketing Division. He has been with the Carey organization 19 years.

Chester L. Owens, previously Manager of the Cincinnati Branch, has been made Assistant General Sales Manager.

PUBLICATIONS AVAILABLE

Asbestos Mining Methods. (Reprint)—25c per copy; discount in quantities of 50 or more. Available January 15.

The Asbestos Factbook (2nd Edition)—Much information about asbestos, in compact form—10c per copy.

Canadian Chrysotile Asbestos Classification (reprint)—25c per copy, or 15c ea. in quantities of 10 or more.

Twelve Estimating Tables with Chart. Convenient in figuring flange fittings and other areas—\$1.00 per set.

Manual of Unit Prices (for figuring pipe covering and blocks)— 30c per copy postpaid.

Processing Asbestos Fibres (Reprint)—of interest to textile plant superintendents or foremen—25c per copy.

Tests for Cotton Content (Reprint from May 1944 "ASBESTOR".)
10c per copy.

Chart—Dollars Cost of Uninsulated Pipe. Reprinted from Page 27, February 1944 "ASSESTOS". 20c each

Asbestos: The Magic Mineral, by Lilian Holmes Strack. Especially interesting to school children—\$1.00 per copy.

Order any of the above from "ASBESTOS", 17th Fl., Inquirer Bldg., Philadelphia, 30, Pa.

PATENTS

This information obtained from the Official Patent Gazette, published weekly by the U. S. Patent Office, Washington, D. C.

Copies of patents can be obtained by sending 10c (in coin) to The Commissioner of Patents, Washington, D. C., giving the patent number, date it was issued, name of patentee and name of invention.

Magnesium Composition. No. 2,358,818. Granted on September 26th, 1944 to Lewis B. Miller, Ambler, Pa., assignor to Keasbey & Mattison Company, Ambler, Pa. Application Nov. 1, 1946. Serial No. 363.897.

The method of extracting magnesium carbonate from dolomite, which consists in calcining the dolomite at relatively low temperatures, slurrying the calcium dolomite with water to form lime and magnesia hydrates, carbonating the slurry within the temperature range from approximately 60°F, to approximately

180°F. until said hydrates are precipitated as relatively small magnesium carbonate crystals and relatively large magnesium arbonate crystals and mechanically separating said crystals.

Pipe Protection Machine. No. 2,359,751. Granted on October 10, 1944. to James D. Cummings and Marquis J. Crose, Houston, Texas, assignors to Johns-Manville Corporation, New York, and Crutcher-Rolfs-Cummings, Houston. Application October 7, 1942. Serial No. 461,176.

A combination pipe cutting and wrapping machine. Further

description upon request.

1944

dising

arket-

years.

innati

int in

about

per

iring

3)-

xtile

8".)

age

pe

rer

te,

n)

ne

O.

a

Anchor. No. 2,360,076. Granted on October 10, 1944, to William S. McLeish, Morehead City, N. C. Assignor to Ric-wil Co., Cleveland, Ohio. Application May 6, 1942. Serial No. 441,991. An inderground conduit securing means. Further description upon request.

Composition and Process of Preparing Same. No. 2,360,645. Granted on October 17, 1944 to Donald S. Bruce and Ralph T. Halstend, Somerville, N. J. Assignors to Johns-Manville Corp., New York. Application December 12, 1941. Serial No. 422,680.

A molding mixture consisting essentially of a major proportion of asbestos fibres and sufficient phenol-formaldehyde resin to provide a heat curable bond, said mixture being rendered color stable by the presence therein of free sulphur in amount constituting 1.25-5% of the dry weight of the mixture.

Detachable Lining for Brake Shoes. No. 2,361,307. Granted on October 24, 1944, to William F. Merritt, Middletown. N. Y.

Application November 3, 1943. Serial No. 508,843.

In combination with a brake shoe having a rim and a web of lining disposed against the outer face of said rim, clips having portions counter sunk in the outer face of said lining and arms passing thru the lining and the rim, the arms of certain of the clips being formed with openings alined with openings and each having threaded fasteners passing thru the alined openings and each having threaded engagement with the web and with one arm of the clip thru which it passes and nuts threaded upon the facings and tightened to exert binding grip to prevent accidental loosening of the fasteners.

General contractors are prepared to start civilian construction programs as soon as the war with Germany is over, which will provide jobs directly and indirectly for several million men and women, says William Muirhead, president of the Associated General Contractors of America.



ASBESTOS PACKINGS

BURBER AND ASBESTOS CORP.

CURRENT RANGE OF PRICE

As of November 10, 1944

The Heating Hotel Smember For fur Avenue nail his benefit Drive copy is

cork

porta new prod and

> plic the Sev use the

> > for ve

Ton (2000	The \		
\$61	50.00	to	\$750.00
10	55.00	to	385,00
) 12	24.00	to	233,50
(32.50	to	82.50
4	14.00	to	49.50
3	33.00	to	
	14.50	to	29.50
Per	Ton	(20	00 lbs.)
f.o.b.	Hyd	e P	ark, Vt
S(32.50	to	\$65,50
4	44.00	to	
			33.06
	14.50	to	28.50
*********			19.50
	\$66 1() 1: 1: Per f.o.b.	\$650.00 165.00) 124.00 62.50 44.00 33.00 114.50 Per Ton £0.b. Hyd \$62.50 44.00	165.00 to 124.00 to 62.50 to 44.00 to 33.00 to 14.50 to Per Ton (20 £.o.b. Hyde P \$62.50 to 44.00 to

Note: Crude Run-of-Mine (Canadian) refers to a crude asbestos produced in certain mines where Crude Fibre is not graded into regular No. 1 and 2 Crude. Crude Sundry refers to certain odd lots of off grade material which do not conform to the regular standards of No. 1 Crude or No. 2 Crude.

ASBESTOS STOCK QUOTATIONS

(These figures are compiled from the Commercial and Financial Chronicle. No guarantee made as to their correctness).

		Octob	er 1944	
	Par	Low	High	Last
Armstrong Cork Co. (Com.)	np	441/4	45%	441/4
Asbestos Corp. (Com.)	np	201/2	211/2	20%
Celotex (Com.)	np	13	141/4	131/4
Celotex (Pfd.)	20	18	18%	18%
Certainteed (Com.)	1	6 %	73/4	7%
Certainteed (Pfd.)	100	112	1261/2	125
Flintkote (Com.)	np	20 %	231/2	22%
Flintkote (Pfd.)	np	1071/2	1091/2	108%
Johns-Manville (Com.)	np	953/4	101	961/4
Raybestos-Manhattan (Com.)	np	311/4	33	321/4
Ruberoid (Com.)	np	321/2	341/2	32%
Thermoid (Com.)	1	81/2	91/4	8%
Thermoid (Pfd.)	10	47	59	49
U. S. Gypsum (Com.)		76	80%	761/4
U. S. Gypsum (Pfd.)	100	1751/2	180	180
U. S. Rubber (Com.)	10	47	51%	48%
U. S. Rubber (Pfd.)	100	141	1491/2	1491/2

THIS and THAT

b. Mine

8750.00

385.00 233.50

82.50

49.50

29.50 lbs.)

k, Vt.

65,50

54.00

33.00 28.50

19.50

duced nd 2

h de

3

and

38).

ast

14/4

14%

%

The 51st Annual Meeting of the American Society of Heating and Ventilating Engineers will be held at the Hotel Statler, Boston, Mass., January 22 to 24, 1945, with members of the Massachusetts Chapter serving as hosts. For further information write the Society at 41 Madison Avenue, New York 10.

"From the Shadoof to the Dominant Drive", a thumb nail history of man's effort to transmit power for his own benefit, has recently been published by Multiple V-Belt Drive Association, 140 S. Dearborn St., Chicago 3, Ill. A copy may be had by those interested, for the asking.

Plastic foam weighing only one-seventh as much as cork has been developed and is being manufactured for important uses by the United States Rubber Company. The new product is called flotofoam because of its buoyancy. To produce it a combination of plastic materials are foamed and then solidified.

A new catalog covering the basic features and applications of the Mikro-Pulverizer line has been issued by the Pulverizing Machinery Company of Summit, N. J. Several asbestos firms are included among their list of users. Copies of the catalog will be sent on request to the Company.

Highway users can expect an uptodate postwar Uniform Vehicle Code next year after state legislatures convene. Finishing touches are now being put on it by a committee of the National Conference on Street and Highway Safety.

The Committee on Research of the American Society of Heating and Ventilating Engineers has announced a Research Program covering 28 Research Projects, and is issuing to members a booklet of 32 pages describing these

projects. A list of these projects will be sent any of our readers who are interested, or it is probable that a copy of the booklet can be obtained by request addressed to the Society at 51 Madison Avenue, New York, 10, N. Y.

"ASSESTOS"	monthly
(liment title of poblication.)	, (Date frequency of soon.)
Philadelphia, Pa. (30) (Name of peak office and State where publication to convent.)	October 1944
TATE OF Pennsylvania	
OUNTY OF Philadelphia	
	in and for the State and county aforesaid, personally appear
Kdi tor	having been duly evens according to law, deposes and says that magazine "ASRESTOS"
	magazine "ASBESTOS" (Beart title of publication.)
and that the informing is, to the seek of a ranowledge and basist, be circulation), etc., of the aforesaid publication for the date 912, as amended by the Act of March 3, 1963, embodied in a f this form, to wit:	a true statement of the ownership, management (and if a daily pape shown in the above caption, required by the Act of August 2 section 537, Postal Laws and Regulations, printed on the reves
1. That the names and addresses of the publisher, editor, man	
None of-	Post offer address-
	17th Floor, Inquirer Bldg.,
ditor A. S. Rossiter	Blue Bell, Montg. Co., Pa.
Janaging Editor A. S. Rossiter Justines Managers (A. S. Rossiter	Blue Bell, Montg. Co., Pa. Blue Bell, Montg. Co., Pa. 1134 S. 52nd St. Phila. p. and address must be stated and also immediately believed by
S. E. COX	1134 S. band St. Della-
2. That the owner is: (If owned by a corporation, its name	and address must be stated and also immediately thereunder
ames and addresses of stockholders owning or notding one per co	ent or more of total amount of stock. If not owned by a corporate
no names and addresses at the reduction	
he names and addresses of the individual owners must be given to name and address, as well as those of each individual membe	n. If owned by a firm, company, or other unincorporated concer
to name and address, as well as those of each individual membe	 If owned by a firm, company, or other unincorporated concer is, must be given.)
to name and address, as well as those of each individual membe	n. If owned by a firm, company, or other unincorporated concer
to name and address, as well as those of each individual membe	 If owned by a firm, company, or other unincorporated concer is, must be given.)
to name and address, as well as those of each individual membe	 If owned by a firm, company, or other unincorporated concer is, must be given.)
te name and address, as well as those of each individual member. Estate of C. J. Stover,	n. If owned by a firm, company, or other unincorporated oncer m, must be given. 130 Summit Awa., Jankintown, Pa.
to name and address, as well as those of each individual member	n. If owned by a firm, company, or other unincorporated occors, must be given. 130 Stummit Ava., Jankintown, Pa., it is a firm of the state of the state of the state of the state occurs occurs of the state occurs occur
te name and address, as well as those of each individual member. Estate of C. J. Stover,	n. If owned by a firm, company, or other unincorporated occors, must be given. 130 Stummit Ava., Jankintown, Pa., it is a firm of the state of the state of the state of the state occurs occurs of the state occurs occur
to name and address, as well as those of each individual resembs Estate Of C. J. Stover. 3. That the known bondholders, mortgagess, and other sections, mortgages, or other securities are: (If there are none, as as	n. If owned by a firm, company, or other unincorporated occors, must be given. 130 Stummit Ava., Jankintown, Pa., it is a firm of the state of the state of the state of the state occurs occurs of the state occurs occur
to name and address, as well as those of each individual resembs Estate Of C. J. Stover. 3. That the known bondholders, mortgagess, and other sections, mortgages, or other securities are: (If there are none, as as	n. If owned by a firm, company, or other unincorporated occors, must be given. 130 Stummit Ava., Jankintown, Pa., it is a firm of the state of the state of the state of the state occurs occurs of the state occurs occur
is name and address, as well as those of each individual resember. Estate Of C. J., Stover. 2. That the known bondholders, mortgagess, and other seconds, mortgages, or other securities are: (If there are mone, as as	n. If owned by a firm, company, or other unincorporated occors, must be given. 130 Stummit Ava., Jankintown, Pa., it is a firm of the state of the state of the state of the state occurs occurs of the state occurs occur
to name and address, as well as those of each individual resembs Estate Of G. J. Stover. 3. That the known bondholders, mortgagess, and other securities are: (If there are none, so so None	a. If owned by a firm, company, or other unincorporated occors, must be given.) 1.30. Stummit. Ava., Jankintonewa, Pa., rity holdess owning or holding I per cent or more of total amount ate.)
to name and address, as well as those of each individual resembs Estate Of C. J. Stover. 3. That the known bondholders, mortgagess, and other securides are: (If there are mone, so six None 4. That the two paragraphs next above, giving the names of the	n. If owned by a firm, company, or other unincorporated occors, must be given, must be given. 130. Summit Are., Jenkintown, Pa, rivity holdens owning or holding 1 per cent or more of total amount also.)
is name and address, as well as those of each individual resembs Estate Of G. J. Stover. 3. That the known bondholders, mortgagess, and other securities are: (If there are none, as in None 4. That the two paragraphs next above, giving the names of the list of stockholders and escurity holders as they appear upon	a. If owned by a firm, company, or other unincorporated occors, must be given, must be given, 130 Stummit Ava-, Tenkintonom, Pa- erity holders owning or holding I per cent or more of total amount ates.) the owners, steckholders, and security holders. If any, contain not to the owners, steckholders, and security holders. If any, contain not to
to name and address, as well as those of each individual resembs Estate Of C. J. Stover. 3. That the known bondholders, mortgagess, and other securidaes are: (If there are none, as as NODE 4. That the two paragraphs next above, giving the names of the list of shockholders and security holder as they appear upon the books of the company as trustees carried to the control of the company as trustees.	n. If owned by a firm, company, or other unincorporated concer, must be given, must be given. 130. Summit Are., Innicintown, Pa, riviy holdens owning or holding 1 per cont or more of total amount ato; be owners, stockholders, and security holders, if any, contain not a the books of the company but also, in cases where the stockholder is any other discisary relation, the mass of the present or corporate or in any other discisary relation, the mass of the present or corporate or co
to name and address, as well as those of each individual resembs Estate Of C. J. Stover. 3. That the known bondholders, mortgagess, and other securities are: (If there are none, as an None 4. That the two paragraphs next above, giving the names of the list of seechholders and security bolders as they appear upon securities and security bolders as they appear upon second-sides great the second security of the second security of the second security of the second second second second security bolders as they appear upon second-sides specific sections and recture the section, is given; also that the said two leads as to the circumstances and conditions under which stocks	a. If owned by a firm, company, or other unincorporated cocors, must be given. 1.30. Stummit. AVA-, Jankintonown. Pa. ricy holdess owning or holding I per cent or more of total amount and the company of the company between the company but also, in cases where the stockholder is an exception of the powers or company to the company but also, in cases where the stockholder is any other fit cases where the stockholder is an expert to the powers or company.
is name and address, as well as those of each individual resembs Estate Of C. J. Stover. 2. That the known bondholders, mortgagess, and other securions, mortgages, or other securities are: (If there are mone, as as NONE 4. That the two paragraphs next above, giving the names of the bist of shockholders and security holders are they appear upon the boats of the company as trustee scaling as to the circumstances and conditions under which stock belief as to the circumstances and conditions under which stock mappany as trustees.	a. If owned by a firm, company, or other unincorporated conors, must be given, must be given. 130 Stummit Area, Tenricintown, Pa, riviy holders owning or holding I per cent or more of total amount atea, let be owners, steckholders, and security holders if any, contain not atea, let be obtained the company has also, in cases where the steckholders has been extracted by the bodies of the company has also, in cases where the steckholders paragraphs contain nationants embandes gradually fill knowledge bodies and security holders who do not appear upon the bodies holders and security holders who do not appear upon the bodies had that that of a loss file owner, and the staffant has no research to let the that that of a loss file owner, and the staffant has no research to let the that of a loss file owner, and the staffant has no research to let
a name and address, as well as those of each individual resembs Estate Of C. J. Stover. 3. That the known bondholders, mortgagess, and other secured, mortgages, or other securities are: (If there are mone, as an NORS 4. That the two paragraphs next above, giving the names of the list of stockholders and security bolders as they appear upon or whom such trustee is acting, is given; also that the said two or whom such trustee is acting, is given; also that the said two goals fas to the circumstances and conditions under which stock company as trustees, hold stock and securities in a capacity other hat any other person, senciation, or composition has any interests	a. If owned by a firm, company, or other unincorporated cocors, must be given.) 1.30. Stummit LAVA., Tenkinson. Pa. ricy holdess owning or holding I per cent or more of total amount and the company of the company between the company between the stockholdess, and encurity holdess, and seem to the stockholdes for he say where the stockholdes ric any where the stockholdes ric any where fluctuary relation, the name of the power or corporate between the stockholdes and security holders and security holders and security holders and security holders are not appear to the books of
a name and address, as well as those of each individual resembs Estate Of C. J. Stover. 3. That the known bondholders, mortgagess, and other securions, mortgages, or other securities are: (If there are mosa, so sin None 4. That the two paragraphs next above, giving the names of the bits of shockholders and escurity holders are they appear upon the boats of the company as trustees excity holders pass upon the boats of the company as trustees, hold sock and escritism in a longesty other has any other person, association, or corporation has any interest that by him.	a. If owned by a firm, company, or other unincorporated conors, must be given. 130 Stummit Ava., Tenricinicova., Pa. 130 Stummit Ava., Tenricinicova., Pa. rity holdess owning or holding I per cent or more of total amount atea.) he owners, stockholders, and security holders, if any, contain not atea. the basels of the company but also, in cases where the stockholder or in any other fiduciary relation, the name of the person or corporate parts out the stockholder or in any other fiduciary relation, the name of the person or corporate parts out the stockholder and security holders who do not appear upon the bods of the than that of a loss fide owner; and this stiffant has no reason to led direct or indirect in the said stock, bonds, or other securities than to
a name and address, as well as those of each individual resembs Estate Of C. J. Stover. 3. That the known bondholders, mortgagess, and other securities are: (If there are mone, as as NORE 4. That the two paragraphs next above, giving the names of the bit of stockholders and security holders are the papear upon the bodson of the company as trustees or whom such trustee is acting, is given; also that the said two graphs upon the bodson of the company as trustees in a capacity other said and the company as trustees, hold stock and securities in a capacity other has any other person, searchistion, or corposation has any interest tabed by him. 5. That the average number of copies of each issue of this p	a. If owned by a firm, company, or other unincorporated conors, must be given.) 1.30. Stummit. AVA-, Tenicinform, Pa. rity holdess owning or holding I per cent or more of total amount at a constant of the company but also, in case where the stockholders is any owner, stockholders, and security holdess where the stockholder or in any where fluid called the company but also, in cases where the stockholder or in any where fluid called the company but also, in cases where the stockholder or in any where fluid called the company but also, in cases where the stockholder or in any where fluid called the company but also, in cases where the stockholder in any where fluid called the company but also, in cases where the stockholder is an any other fluid called the company but also, in cases where the stockholder is an any other stockholder or in any other stockholders are considered or distributed, through
a name and address, as well as those of each individual resemble Estate of C. J. Stover. 3. That the known bondholders, mortgagess, and other sec- ends, mortgages, or other securities are: (If there are mone, as at None 4. That the two paragraphs next shows, giving the names of the list of stockholders and security holders are they appear upon estify holders appear upon the bonds of the company as trustees or whom such trustee is acting, is given; also that the said two company as trustees, hold stock and securities in a capacity other company as trustees, hold stock and securities in a capacity other that by him. 5. That the average number of copies of such issue of this p estate by him. 6. That the average number of copies of such issue of this p estate the such control of the company is the such that the said two himselfs or to the criteria.	a. If owned by a firm, company, or other unincorporated conors, must be given. 130 Stummit Area, Tenicintown, Pa, irity holdens owning or holding I per cent or more of total amount ates. he owners, stockholdens, and security holdens, if any, contain not a tab books of the company but also, in cases where the stockholdens are any other thickness, real any other thickness years and the same of the person or corporal paragraphs contain estamass embracing affairs full knowledge in the same of the person or corporal paragraphs contain estamass embracing affairs full knowledge than that of a boat field were sufficient to the same of the person or corporal paragraphs contain estamass embracing affairs full knowledge distinct or indirect in the said stock, bonds, or other securities than a sublication said or distributed, through
a name and address, as well as those of each individual resemble. Ratate of C. J. J. Stover. 3. That the known bondholders, mortgagess, and other securities are: (If there are none, as at None. 4. That the two paragraphs next above, giving the names of the list of stockholders and security holders are they appear upon the boals of the company as trustees evident such trustee is acting, is given; also that the said two company as trustees, but such a stockholders and security holders are whom such trustee is acting, is given; also that the said two sizes are trustees, but such as the said two company as trustees, hold stock and securities in a capacity other made by him. 5. That the average number of copies of each fees of this period by him. 6. That the average number of copies of each fees of this period is the said two periods.	a. If owned by a firm, company, or other unincorporated conors, must be given. 130 Stummit Area, Tenicintown, Pa, irity holdens owning or holding I per cent or more of total amount ates. he owners, stockholdens, and security holdens, if any, contain not a tab books of the company but also, in cases where the stockholdens are any other thickness, real any other thickness years and the same of the person or corporal paragraphs contain estamass embracing affairs full knowledge in the same of the person or corporal paragraphs contain estamass embracing affairs full knowledge than that of a boat field were sufficient to the same of the person or corporal paragraphs contain estamass embracing affairs full knowledge distinct or indirect in the said stock, bonds, or other securities than a sublication said or distributed, through
a name and address, as well as those of each individual resemble. Ratate of C. J. J. Stover. 3. That the known bondholders, mortgagess, and other securities are: (If there are none, as at None. 4. That the two paragraphs next above, giving the names of the list of stockholders and security holders are they appear upon the boals of the company as trustees evident such trustee is acting, is given; also that the said two company as trustees, but such a stockholders and security holders are whom such trustee is acting, is given; also that the said two sizes are trustees, but such as the said two company as trustees, hold stock and securities in a capacity other made by him. 5. That the average number of copies of each fees of this period by him. 6. That the average number of copies of each fees of this period is the said two periods.	a. If owned by a firm, company, or other unincorporated conors, must be given. 130 Stummit Area, Tenicintown, Pa. 130 Stummit Area, Tenicintown, Pa. rity holdom owning or holding I per cent or more of total amout atm. the owners, stockholdors, and mentity holdom, if any, contain not the books of the company but also, in case where the stockholdors is any other disclosive relation, the name of the person or corpora perspective contain estamates embedding affairs full knowledge are any other disclosive relation, the name of the person or corpora perspects contain estamates embedding distinct full knowledge than that of a loss file owner and the affairs has not seem to belief distinct or indirect in the said stock, bonds, or other securities than other contains or of distributed, through
a name and address, as well as those of each individual resemble. Ratate of C. J. J. Stover. 3. That the known bondholders, mortgagess, and other securities are: (If there are none, as at None. 4. That the two paragraphs next above, giving the names of the list of stockholders and security holders are they appear upon the boals of the company as trustees evident such trustee is acting, is given; also that the said two company as trustees, but such a stockholders and security holders are whom such trustee is acting, is given; also that the said two sizes are trustees, but such as the said two company as trustees, hold stock and securities in a capacity other made by him. 5. That the average number of copies of each fees of this period by him. 6. That the average number of copies of each fees of this period is the said two periods.	a. If owned by a firm, company, or other unincorporated conors, must be given. 130 Stummit Area, Tenicintown, Pa. 130 Stummit Area, Tenicintown, Pa. rity holdom owning or holding I per cent or more of total amout atm. the owners, stockholdors, and mentity holdom, if any, contain not the books of the company but also, in case where the stockholdors is any other disclosive relation, the name of the person or corpora perspective contain estamates embedding affairs full knowledge are any other disclosive relation, the name of the person or corpora perspects contain estamates embedding distinct full knowledge than that of a loss file owner and the affairs has not seem to belief distinct or indirect in the said stock, bonds, or other securities than other contains or of distributed, through
a name and address, as well as those of each individual resemble. Ratate of C. J. J. Stover. 3. That the known bondholders, mortgagess, and other securities are: (If there are none, as at None. 4. That the two paragraphs next above, giving the names of the list of stockholders and security holders are they appear upon the boals of the company as trustees evident such trustee is acting, is given; also that the said two company as trustees, but such a stockholders and security holders are whom such trustee is acting, is given; also that the said two sizes are trustees, but such as the said two company as trustees, hold stock and securities in a capacity other made by him. 5. That the average number of copies of each fees of this period by him. 6. That the average number of copies of each fees of this period is the said two periods.	a. If owned by a firm, company, or other unincorporated conors, must be given. 130 Stummit Area, Tenicintown, Pa. 130 Stummit Area, Tenicintown, Pa. rity holdom owning or holding I per cent or more of total amout atm. the owners, stockholdors, and mentity holdom, if any, contain not the books of the company but also, in case where the stockholdors is any other disclosive relation, the name of the person or corpora perspective contain estamates embedding affairs full knowledge are any other disclosive relation, the name of the person or corpora perspects contain estamates embedding distinct full knowledge than that of a loss file owner and the affairs has not seem to belief distinct or indirect in the said stock, bonds, or other securities than other contains or of distributed, through
a name and address, as well as those of each individual resemble. Ratate of C. J. J. Stover. 3. That the known bondholders, mortgagess, and other securities are: (If there are none, as at None. 4. That the two paragraphs next above, giving the names of the list of stockholders and security holders are they appear upon the boals of the company as trustees evident such trustee is acting, is given; also that the said two company as trustees, but such a stockholders and security holders are whom such trustee is acting, is given; also that the said two sizes are trustees, but such as the said two company as trustees, hold stock and securities in a capacity other made by him. 5. That the average number of copies of each fees of this period by him. 6. That the average number of copies of each fees of this period is the said two periods.	a. If owned by a firm, company, or other unincorporated conors, must be given. 130 Stummit Area, Tenicintown, Pa. 130 Stummit Area, Tenicintown, Pa. rity holdom owning or holding I per cent or more of total amout atm. the owners, stockholdors, and mentity holdom, if any, contain not the books of the company but also, in case where the stockholdors is any other disclosive relation, the name of the person or corpora perspective contain estamates embedding affairs full knowledge are any other disclosive relation, the name of the person or corpora perspects contain estamates embedding distinct full knowledge than that of a loss file owner and the affairs has not seem to belief distinct or indirect in the said stock, bonds, or other securities than other contains or of distributed, through
name and address, as well as those of each individual membe ESTREE OF C. J. StOYER. 3. That the known bondholders, mortgagees, and other sec- meds, nortgages, or other securities are: (If there are none, so st NODE. 4. That the two paragraphs next above, giving the names of te list of acchicholders and security holden as they appear upon estimated the security holders are they appear upon estimated the security holders and security holders are two accurate holds are successfully holder appearing to the company as trustees whom such trustee is acting, is given; also that the said two many as trustees, hold seed and securities in a capacity other supports a trustees, hold seed and securities in a capacity other such as the company as machalicies, see any inseed 5. That the average number of copies of each fees of the twice so make or cheevine, to make dependent where the twice to see and are otherwise, to make dependent where the twice each of the company and the company as the second of the seco	a. If owned by a firm, company, or other unincorporated conor, must be given.) 1.30. Summit. Awa., Tenricint.cown. Pa. ricy holdess owning or helding I per cent or more of total amounts. be owners, stockholders, and security holders, if any, contain not the books of the company but also, in case where the stockholder is any subscribed by the company but also, in case where the stockholder is any subscribed with the books of the company but also, in case where the stockholder is any subscribed with the company but also, in case where the stockholder is any subscribed with the company but also are considered in the stockholder in any subscribed with the company but also considered and the stockholder in any subscribed with the company but also considered on the stockholder in the period of the period of the company but also in the stockholder of the period of the company but also in the stockholder of the period of the period of the company but also in the stockholder of the period of the perio

Sectional view of Durant Insulated Pipe, showing construction features. Pipe, insulation and protection are factory-fabricated into units.



D.I.P.

of our

to the

BY THE

maj

y paper, tool 24,

Pa-

a of

iynader

... SETS STANDARDS FOR UNDERGROUND INSULATED PIPING

Ehret's Durant Insulated Pipe combines the high insulating efficiency of 85% Magnesia and the time-defying characteristics of imperishable asphalt. Added to this advantage is factory-fabricated construction which makes field installation both rapid and economical.

Send for the special Ehret booklet on D. I. P. It contains full details on this modern system for underground insulated piping.

EHRET MAGNESIA MANUFACTURING COMPANY

VALLEY FORGE . PENNSYLVANIA

SOUTHERN ASBESTOS COMPANY

Asbestos Textile Products since 1919

A Complete Line of Products



The facilities of our sales and research organization are at the disposal of any manufacturer who has a problem to solve which involves the use of fabricated asbestos.



